

REMARKS

Applicants respectfully traverse and request reconsideration.

Claims 1-7 and 9-16 are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,577,317 B1, Duluk, Jr. et al. (“Duluk”) in view of Bishop et al (“Bishop”) (Printed Publication entitled, “Designing a PC Game Engine).

Claim 1 recites, among other novel features, “for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility query identifier, **wherein the visibility query identifier corresponds to a single or multi-bit indicator; and rendering one or more draw packets having the set visibility query identifier**”. (Emphasis Added). It is respectfully submitted that Duluk and Bishop, either singly or in combination, fail to disclose, teach or suggest at least these features.

On lines 4-9 on page 5, the Office Action states that “[i]t is noted that the creation of packetized vertex information (e.g., color vertex packets, spatial vertex packets and/or propagated vertex packets) from said series of packets passed to geometry block 842 is considered to read on draw packets with a set visibility query identifier as the creation of said packetized vertex information is an indication that a given packet from said series of packets passed to geometry block 842 was not culled or clipped (e.g., discarded)”. It is respectfully submitted that Duluk’s approach differs from Applicants’ claimed invention as recited in claim 1.

For example, claim 1 requires a method that includes receiving a plurality of draw packets, and then comparing each of the plurality of draw packets to a bounding volume object, wherein the bounding volume object is a geometric representation of a specific object identified as geometry whose visibility status is desired. In addition, claim 1 requires that for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility

query identifier, wherein the visibility query identifier corresponds to a single or multi-bit indicator. Further, claim 1 requires rendering one or more draw packets having the set visibility query identifier. As such, claim 1 sets the single or multi-bit indicator of a visibility query identifier and renders one or more draw packets having the set visibility query identifier. Applicants respectfully submit that the Duluk fails to teach such features. In contrast to the Office Action's assertions, Duluk's approach of creating packetized vertex information (e.g., color vertex packets, spatial vertex packets and/or propagated vertex packets) from a series of packets simply fails to teach or suggest "for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility query identifier, **wherein the visibility query identifier corresponds to a single or multi-bit indicator; and rendering one or more draw packets having the set visibility query identifier**", as recited by Applicants in claim 1. The claims are allowable for this reason alone.

Moreover, Bishop fails to overcome the deficiencies found in Duluk. Instead, Bishop relates to the requirements for designing a 3D game engine, wherein portals draw themselves by adding a clipping plane to the camera for each edge of the portal polygon. See e.g., column 2 on page 50 of Bishop. Bishop further discloses these planes are each defined by a portal polygon edge and the camera center such that each portal adds a new frustum to the set of culling/clipping planes. See e.g., column 2 on page 50 of Bishop. Having pushed the new clipping planes, the portal draws its adjoiner and then removes the clipping planes it added to the camera. As such, geometry in a portal's adjoiner is culled and clipped to the portal. See also, column 2 on page 50 of Bishop. However, Bishop fails to disclose, teach or suggest that for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility query identifier, wherein the visibility query identifier corresponds to a single or multi-bit indicator;

and rendering one or more draw packets having the set visibility query identifier. Thus, Bishop's approach presents difficulties to a user who desires to set a visibility query identifier when a draw packet is deemed potentially visible, and then render one or more draw packer based on the set visible query identifier.

More specifically, it is respectfully submitted that Duluk and Bishop, either singly or in combination, fail to disclose, teach or suggest "for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility query identifier, **wherein the visibility query identifier corresponds to a single or multi-bit indicator; and rendering one or more draw packets having the set visibility query identifier**", as recited by Applicants in claim 1. In view of the above, it is respectfully submitted that the rejection is overcome.

Applicants further note that independent claims 7 and 11 as amended above include substantially similar limitations to those described above relative to claim 1. Thus, claims 7 and 11 are also in suitable condition for allowance for at least the same reasons presented above with respect to claim 1.

Claims 2-6, 9, 10 and 12-16 each ultimately depend on claims 1, 7 and 11 and are allowable for at least similar reasons. Claims 2-6, 9, 10 and 12-16 are also believed to be allowable for having novel and non-obvious subject matter. Therefore, reconsideration and withdrawal of the rejection of claims 2-6, 9, 10 and 12-16 is respectfully requested.

Claims 17-19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Duluk in view of Bishop, and further in view of U.S. Patent No. 5,886,702 to Migdal et al. Claim 17 contains the same or similar limitations as presented above with respect to claims 1, 7 and 11. Moreover, Migdal fails to cure the deficiencies found in Duluk and Bishop. It is respectfully submitted that nothing was cited or has been found in Migdal suggesting modification of Duluk

or Bishop to overcome the deficiencies discussed above with respect to “for each of the plurality of draw packets, if the draw packet is deemed potentially visible, setting a visibility query identifier, wherein the visibility query identifier corresponds to a single or multi-bit indicator; and rendering one or more draw packets having the set visibility query identifier”, as recited in claims 1, 7, 11 and 17. Therefore, claim 17 is in proper condition for allowance for at least the same reasons as provided above. Finally, each of dependent claims 18 and 19 depend from allowable claims 17 and are further believed to add additional novel, non-obvious and patentable subject matter. For each of the aforementioned reasons, the above-listed dependent claims are also believed to be in condition for allowance.

Accordingly, Applicants respectfully submit that the claims are in condition for allowance and that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below-listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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